

RESPONSE UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE REQUESTED
EXAMINING GROUP 1711
PATENT

Customer No. 22,852
Attorney Docket No. 02887.0144-01

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TC 1700

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Takaaki MURATA et al.

Application No.: 09/899,929

Filed: July 9, 2001

For: OZONIZING UNIT, OZONE
GENERATOR AND OZONE-
PROCESSING SYSTEM

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) Group Art Unit: 1711
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) Examiner: T. Tran
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

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RESPONSE AND REQUEST FOR RECONSIDERATION AFTER FINAL

In reply to the Final Office Action mailed June 26, 2003, the period for response having been extended to October 26, 2003, by a Petition for Extension of Time for one month and fee payment filed concurrently herewith, Applicants respectfully request reconsideration of the subject application for the reasons set for below.

Remarks begin at page 2 of this paper.

Attachments to this response include Exhibit A, 1 page.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

REMARKS

In the Final Office Action ("FOA"), the Examiner withdrew the objection to the specification; withdrew the objection to claims 39 and 44; and withdrew the rejection of claims 36-41 under 35 U.S.C. § 112. Further, the Examiner maintained the rejection of claims 36, 38-40, and 44 under 35 U.S.C. § 102(b) as anticipated by Miyagawa et al., U.S. Patent No. 4,626,876 ("Miyagawa") and maintained the rejection of claims 37 and 41-43 under 35 U.S.C. § 103(a) as unpatentable over Miyagawa as applied to claim 36. In response, Applicants respectfully submit that the rejections under sections 102(b) and 103(a) are improper because Miyagawa fails to teach all the elements of the claims.

For convenience, Applicants include with this response Exhibit A, which illustrates the differences between an embodiment according to the present invention and the disclosure of Miyagawa. Drawing I of Exhibit A is a reproduction of Miyagawa's Fig. 4 illustrating the field produced by the invention. Drawing II illustrates an example consistent with aspects of the present invention.

With reference to Exhibit A, the present invention is directed to an ozonizing unit that effectively generates a source gas. In one example of the present invention, the ozonizing unit includes a pair of electrodes that are formed on one surface of a dielectric substrate. (Exhibit A, drawing II.) As shown in the drawings, since the pair of electrodes are provided on one surface of a dielectric substrate, the initial potential lines are uniformly distributed in the space.

On the other hand, Miyagawa discloses a corona discharger which includes a pair of electrodes 2 and 3 that are formed inside a dielectric 1. (Exhibit A, drawing I.) Further, the corona discharger includes an electrode 5 formed on a surface of dielectric 1. (Exhibit A, drawing I.) In contrast to the present invention, the initial potential lines are not uniformly

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

distributed. As shown in the drawings, a dense portion of initial potential lines are formed around electrode 5 and a thin portion of initial potential lines are formed in the space. Accordingly, the ozonizing unit according to the present invention differs from the corona discharger of Miyagawa.

With specific reference to the claims, claim 36 recites, *inter alia*, “a hot electrode and a stray electrode, each having linear electrode elements formed on one surface of [a] dielectric substrate; and a back electrode formed on the other surface of the dielectric substrate.”

In the section 102(b) rejection of claims 36, 38-40, and 44, the Examiner basically repeated the grounds of rejection presented in the Office Action dated September 18, 2002. (FOA at ¶ 7.) The Examiner alleged that Miyagawa teaches an ozonizing unit comprising a hot electrode and stray electrodes 2 and 3. (FOA at ¶ 7.) However, contrary to the Examiner’s allegations, Miyagawa fails to disclose that electrodes 2 and 3 are formed on the surface of a dielectric substrate. More particularly, Miyagawa illustrates that first electrode 3 and second electrode 4 are formed inside dielectric 1. Miyagawa, Figs. 4 and 5. Furthermore, Miyagawa illustrates only a third electrode 5 formed on a surface of dielectric 1.

Thus, Miyagawa fails to teach at least “a hot electrode and a stray electrode, each having linear electrode elements formed on one surface of [a] dielectric substrate; and a back electrode formed on the other surface of the dielectric substrate.” Accordingly, Miyagawa fails to anticipate claim 36 and that claim should be allowed.

Claims 38-40 depend from allowable claim 36, and, thus, Miyagawa does not anticipate these claims at least for the reasons mentioned above.

Furthermore, claim 44 recites, *inter alia*, “a hot electrode having linear electrode elements formed on one surface of [a] dielectric substrate; and an additional electrode formed on

one surface of the dielectric substrate.” As mentioned above, Miyagawa illustrates only a third electrode 5 formed on a surface of dielectric 1. Thus, Miyagawa fails to anticipate claim 44.

In the section 103(a) rejection of claims 37 and 41-43, the Examiner basically repeated the grounds of rejection presented in the Office Action dated September 18, 2002. (FOA at ¶ 9.) In response, Applicants respectfully submit that a *prima facie* case of obviousness has not been established because Miyagawa fails to teach or suggest all the elements of these claims.

Claims 37 and 41 depend from claim 36, and, thus, incorporate the elements of that claim. As mentioned above, Miyagawa fails to teach or suggest all the elements of claim 36. Thus, Miyagawa fails to teach or suggest all the elements of claims 37 and 41 due to their dependence from claim 35. Accordingly, a *prima facie* case of obviousness has not been established for claims 37 and 41.

Moreover, claim 42 recites, *inter alia*, “a hot electrode having linear electrode elements formed on one surface of [a] dielectric substrate; and a back electrode having linear electrode elements formed on the other surface of the dielectric substrate.” As mentioned above, Miyagawa illustrates only a third electrode 5 formed on a surface of dielectric 1. Thus, Miyagawa fails to teach or suggest all the elements of claim 42. Accordingly, a *prima facie* case of obviousness has not been established for 42.

Claim 43 depends from claim 42, and, thus, Miyagawa fails to teach or suggest all the claim elements at least for the reasons mentioned above due to this dependency. Accordingly, a *prima facie* case of obviousness has not been established.

In view of the foregoing remarks, Applicants submit that this claimed invention is neither anticipated nor rendered obvious in view of the prior art references cited against this application.

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

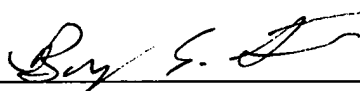
Applicants therefore request reconsideration and reexamination of the application, and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, L.L.P.

Dated: October 24, 2003

By: 
Bryan S. Latham
Reg. No. 49,085

Attachments: Exhibit A

FINNEGAN
HENDERSON
FARABOW
GARRETT &
DUNNER LLP

1300 I Street, NW
Washington, DC 20005
202.408.4000
Fax 202.408.4400
www.finnegan.com

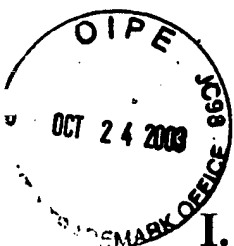
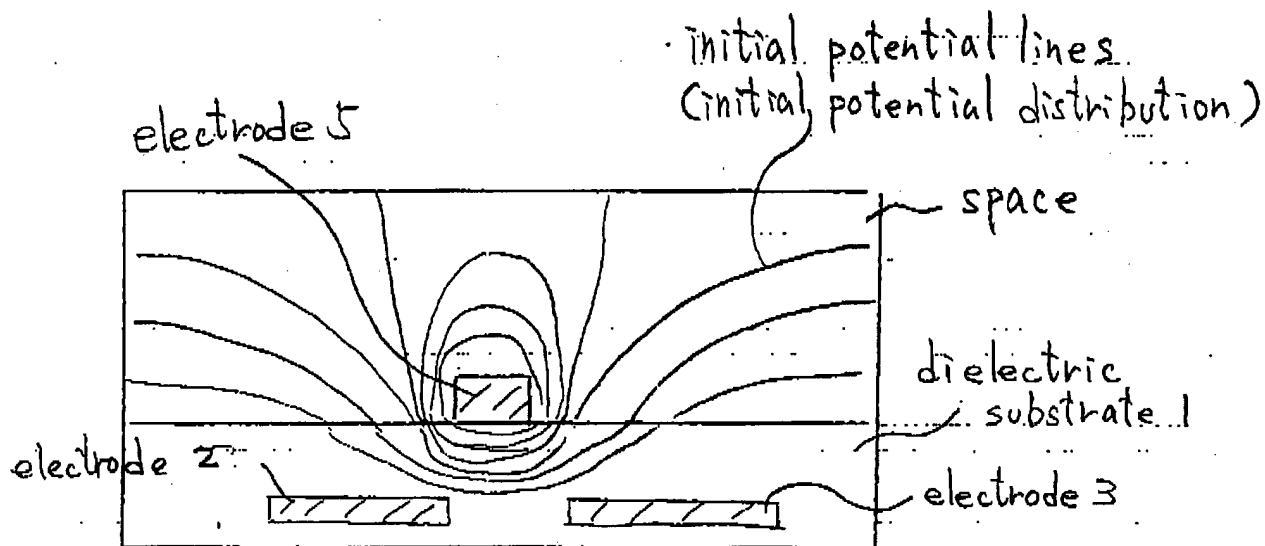


EXHIBIT A

I. Miyagawa



II. Present Invention

